



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,548	10/01/2003	Goro Nakamura	03327.2310	5745
22852	7590	10/24/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			VORTMAN, ANATOLY	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/674,548	NAKAMURA, GORO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anatoly Vortman	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 2 and 6-8 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 13 September 2005 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Amendment*

1. The submission of the amendment filed on 09/13/05 is acknowledged. At this point independent claim 1 has been amended and dependent claim 2 has been rewritten into independent form. Claims 1-8 are pending in the instant application. Office action follows:

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3, are rejected under 35 U.S.C. 102(b) as being anticipated by US/5,841,338 to Yasukuni (amended portions underlined).

Regarding claim 1, Yasukuni disclosed (Fig. 4-9) a fusible link unit comprising:

at least one fuse circuit structure (Fig. 9) containing a plurality of terminal portions (31) linked through fusible members (20) to a linking plate (33); a housing (21) into which said fuse circuit structure is assembled; and at least one terminal support (15) for supporting a corresponding one of said terminal portions (31) in a state that a front surface of the

Art Unit: 2835

corresponding terminal portion is exposed from said housing (21) (Fig. 4), wherein said terminal support (15) includes at least one pawl part (19) extending in a slide insertion direction of said corresponding terminal portion (see response to arguments further) for preventing a displacement of said corresponding terminal portion in a direction substantially normal to a surface of said corresponding terminal portion (Fig. 6).

Regarding claim 3, Yasukuni disclosed (Fig. 6) that said terminal support (15) includes a pair of pawl parts (19) and a pair of grooves formed along said pawl parts, and side edges of the corresponding terminal portion (16) are entered into said pair of grooves.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 5, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasukuni in view of US/6,509,824 to Inaba et al., (Inaba).

Regarding claim 4, Yasukuni disclosed all, but the nut-screw terminal connection.

Inaba disclosed (Fig. 17) a fusible link unit (91) having fusible link (85) comprising electrical terminal (not numbered) disposed in a terminal support (84) and connected to a mating terminal (82) via a nut member (88) and a screw (86).

Since inventions of Yasukuni and of Inaba are from the same field of endeavor (fusible link units), the purpose of the nut-screw terminal connection taught by Inaba would be recognized in the invention of Yasukuni.

It would have been obvious to a person of ordinary skill in the fuse art at the time the invention was made to provide terminals in the fuse link unit of Yasukuni with the nut-screw connections as taught by Inaba in order to adapt said fuse link unit of Yasukuni for the high current applications (it is notoriously known in the electrical fields of endeavor, that nut-screw terminal connections are more reliable and have less  $I^2R$  losses than regular frictional terminal connections as taught by Yasukuni).

Regarding claim 5, Inaba teaches (Fig. 17) a nut receiving recess in the terminal support (84) (for accepting the nut (88)).

*Allowable Subject Matter*

6. Claims 2 and 6-8, are allowed.
7. The following is a statement of reasons for the indication of allowable subject matter:  
regarding claims 2 and 6-8, the parent claim 2 recites: "tilting parts";  
the aforementioned limitations in combination with all remaining limitations of claim 2, are believed to render said claim 2 and claims 6-8 dependent thereon, patentable over the art of record.

***Response to Arguments***

8. Applicant's arguments regarding claim 1 have been fully considered but they are not persuasive. The gist of the arguments is that: “[A]s shown in Fig. 4 of Yasukuni, projections 19 extend in a direction orthogonal to the slide insertion direction of fusible portions 20. Thus, the projections 19 of Yasukuni are not the same as Applicant's claimed pawl part extending in a slide insertion direction of a corresponding terminal portion, as required by amended claim 1” (see p. 7, lines 8+ of the Amendment).

This is not persuasive. Contrary to the Applicant's assumption, said pawl parts (19) of Yasukuni are three-dimensional components, hence they extend not only orthogonally to the slide insertion direction, but also in a slide insertion direction as well. Had these pawl parts were being extended only orthogonally to the slide insertion direction, they (pawl parts) would not be able to prevent a displacement (as they do) of the corresponding terminal portion in a direction substantially normal (i.e. orthogonal) to a surface of said corresponding terminal portion. Thus, claim 1, as amended, still read on Yasukuni ('338) patent.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anatoly Vortman  
Primary Examiner  
Art Unit 2835